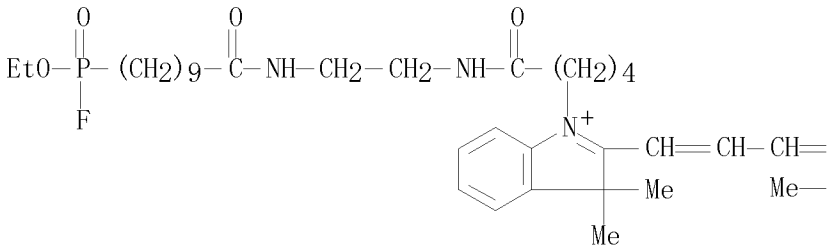
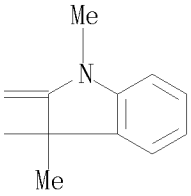
```
=> d his

     (FILE 'HOME' ENTERED AT 14:51:05 ON 17 AUG 2009)

     FILE 'REGISTRY' ENTERED AT 14:51:18 ON 17 AUG 2009
L1               STRUCTURE UPLOADED
L2             0 S L1
L3             1 S L1 FULL

=> d que l3 stat
L1               STR
           P---F

Hy----[CH----CH]1-10CH----Cy

Structure attributes must be viewed using STN Express query preparation.
L3             1 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED   29254 ITERATIONS                                1 ANSWERS
SEARCH TIME: 00.00.01

=> d ide can

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   615557-62-5  REGISTRY
ED   Entered STN:  12 Nov 2003
CN   3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-
     propen-1-yl]-1-(20-fluoro-20-oxido-5,10-dioxo-21-oxa-6,9-diaza-20-
     phosphatricos-1-yl)-3,3-dimethyl-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-
     propenyl]-1-(20-fluoro-20-oxido-5,10-dioxo-21-oxa-6,9-diaza-20-
     phosphatricos-1-yl)-3,3-dimethyl- (9CI)
MF   C43 H63 F N4 O4 P
SR   CA
LC   STN Files:   CA, CAPLUS
```

PAGE 1-A



PAGE 1-B




1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:334625

=> fil capl
FILE 'CAPLUS' ENTERED AT 14:52:36 ON 17 AUG 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


FILE COVERS 1907 - 17 Aug 2009 VOL 151 ISS 8
FILE LAST UPDATED: 16 Aug 2009 (20090816/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

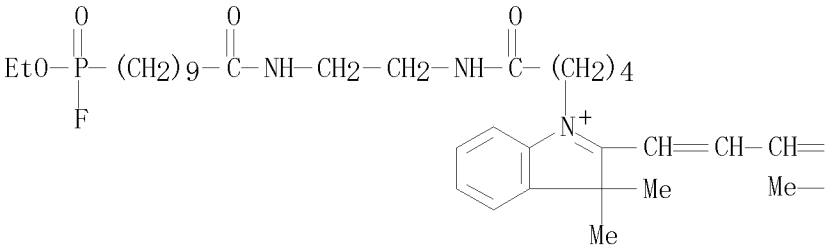
The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.
'.FIONA' IS DEFAULT FORMAT FOR 'CAPLUS' FILE

=> s l3
L4 1 L3

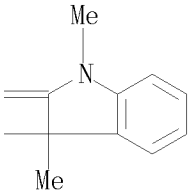
=> d bib abs hitstr

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2003:314907 CAPLUS
DN 139:334625
TI Developing a strategy for activity-based detection of enzymes in a protein microarray
AU Chen, Grace Y. J.; Uttamchandani, Mahesh; Zhu, Qing; Wang, Gang; Yao, Shao Q.
CS Department of Chemistry, National University of Singapore, Singapore, 117543, Singapore
SO ChemBioChem (2003), 4(4), 336-339
CODEN: CBCHFX; ISSN: 1439-4227
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB The microarray strategy that allows high throughput, activity-based detection of enzymes immobilized on a glass slide, and its potential application for rapid screenings of enzyme inhibitors are described. Three probes (PT-Cy3, VS-Cy3, FP-Cy3) were designed as broad-based probes for the simultaneous identification of class-specific unknown enzymes in a protein microarray. Three major classes of enzymes (phosphatases, cysteine proteases, and serine hydrolases), were chosen as the targets of the study. In addition, a highly specific probe (caspase-1 probe) was also tested and showed high selectivity towards caspase-1 over other noncaspase cysteine proteases. The microarray-based strategy is a protein-array based strategy that allows the detection of proteins not merely by their binding, but rather by their enzymic activities. The strategy may be used as a viable means for rapid assessment of a candidate drug against a large number of its potential target enzymes.
IT 615557-62-5
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(strategy for activity-based detection of enzymes in a protein microarray)
RN 615557-62-5 CAPLUS
CN 3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propen-1-yl]-1-(20-fluoro-20-oxido-5,10-dioxo-21-oxa-6,9-diaza-20-phosphatricos-1-yl)-3,3-dimethyl- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B




OSC.G 62 THERE ARE 62 CAPLUS RECORDS THAT CITE THIS RECORD (63 CITINGS)
RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s fluoroalkylphosphate? or fluorophosphate?
26 FLUOROALKYLPHOSPHATE?
6582 FLUOROPHOSPHATE?
L5 6605 FLUOROALKYLPHOSPHATE? OR FLUOROPHOSPHATE?

=> s l5 and ?cyanine?
73362 ?CYANINE?
L6 16 L5 AND ?CYANINE?

=> d 1-16 bib abs kwic

L6 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2008:1039427 CAPLUS
DN 149:296244
TI Presensitized lithographic plates for direct IR laser platemaking and lithographic printing using them with on-machine development
IN Suzuki, Akihiro; Kawaguchi, Junji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 72pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI JP 2008195018 | A | 20080828 | JP 2007-34910 | 20070215 |
| PRAI JP 2007-34910 | | 20070215 | | |

OS MARPAT 149:296244
AB The plates have image-forming layers removable by printing inks and/or dampening water, and containing (A) radical generators, (B) IR absorbers, e.g., cyanine dyes, (C) ethylenically unsatd. compds., and (D) compds. having counter anions chosen from AsF6-, BF4-, PF6-, SbF6-, and ClO4- other than A-C. Polymerizable compns. containing A-D, and microcapsules or microgels are also claimed. Preferably, the plates further have protective layers containing mica on the image-forming layers. The plates show good ink absorption and durability, and produce images with good visibility after platemaking.
AB . . . plates have image-forming layers removable by printing inks and/or dampening water, and containing (A) radical generators, (B) IR absorbers, e.g., cyanine dyes, (C) ethylenically unsatd. compds., and (D) compds. having counter anions chosen from AsF6-, BF4-, PF6-, SbF6-, and ClO4- other. . .
ST machine development IR laser presensitized lithog plate;

fluorophosphate lithog plate image visibility
IT Optical materials
(IR absorbers, cyanine dyes; IR laser-sensitive presensitized lithog. plates for platemaking and lithog. printing with on-machine development)
IT Cyanine dyes
(IR-absorbing; IR laser-sensitive presensitized lithog. plates for platemaking and lithog. printing with on-machine development)
IT IR materials
(absorbers, cyanine dyes; IR laser-sensitive presensitized lithog. plates for platemaking and lithog. printing with on-machine development)

L6 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:508624 CAPLUS
DN 146:502522
TI Non-woven fabric with absorbent indicator
IN Canales Espinosa De Los Monteros, Carlos; Fajardo Eslaba, Bernardo
PA Grupo P.I. Mabe, S.A. De C.V., Mex.
SO PCT Int. Appl., 15pp.
CODEN: PIXXD2
DT Patent
LA Spanish
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2007053001 | A2 | 20070510 | WO 2006-MX120 | 20061103 |
| | WO 2007053001 | A3 | 20090416 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| | MX 2005011978 | A | 20070503 | MX 2005-11978 | 20051104 |
| | EP 1944159 | A2 | 20080716 | EP 2006-824214 | 20061103 |
| | R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| | US 20080305700 | A1 | 20081211 | US 2008-92541 | 20080711 |
| PRAI | MX 2005-11978 | A | 20051104 | | |
| | WO 2006-MX120 | W | 20061103 | | |

AB The non-woven fabric which is intended to be used in a disposable absorbent article contains a fluorophosphate optical indicator that is visible upon exposure to IR light, a thermal indicator visible upon heating to 25-80°, or a dye. The dye is selected from indigo dye, thio-indigo, Cu phthalocyanines, thiazoles, toluenediamines, quinaphthalones, alizarins, naphtholes, diazonaphtholes, azo dyes, and their derivs. The fabric consists of conventional natural or synthetic fibers, treated with surfactants to modify hydrophobicity, and has protective layers.
AB The non-woven fabric which is intended to be used in a disposable absorbent article contains a fluorophosphate optical indicator that is visible upon exposure to IR light, a thermal indicator visible upon heating to 25-80°, or a dye. The dye is selected from indigo

dye, thio-indigo, Cu phthalocyanines, thiazoles, toluenediamines, quinaphthalones, alizarins, naphtholes, diazonaphtholes, azo dyes, and their derivs. The fabric consists of conventional natural or synthetic fibers,. . .

IT 147-14-8, Copper phthalocyanine
RL: TEM (Technical or engineered material use); USES (Uses)
(disposable absorbent pads of non-woven fabric with wetness indicator)

L6 ANSWER 3 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:332298 CAPLUS
DN 136:343182
TI Removal of mercaptans from hydrocarbon streams using ionic liquids
IN O'Rear, Dennis J.; Boudreau, Laura C.; Driver, Michael S.; Munson, Curtis L.
PA Chevron U.S.A. Inc., USA
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO 2002034863 | A1 | 20020502 | WO 2001-US32211 | 20011016 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA 2426770 | A1 | 20020502 | CA 2001-2426770 | 20011016 |
| | AU 2002016629 | A | 20020506 | AU 2002-16629 | 20011016 |
| | EP 1337605 | A1 | 20030827 | EP 2001-988754 | 20011016 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| PRAI | US 2000-697200 | A | 20001026 | | |
| | WO 2001-US32211 | W | 20011016 | | |

AB Methods for removing mercaptans from hydrocarbons streams, e.g. crude oil and natural gas, are provided. The methods use basic metal salts which react with mercaptans to form mercaptides. The metal salts are dissolved or suspended in ionic liqs., which tend to have virtually no vapor pressure. After the mercaptides are adsorbed into the ionic liquid, the demercaptanized hydrocarbon stream can be removed, e.g. by distillation, decantation or gravity separation Then the mercaptides can be oxidized, e.g., by exposure to air, to form disulfides. The disulfides are insol. in the ionic liqs., and can be readily removed. NaOH is a preferred salt. Non-H2O reactive ionic liqs. are preferred. The mercaptan-containing hydrocarbon stream can be in the gas phase or in the liquid phase. The flow of hydrocarbon stream over/through the ionic liquid can be e.g., co-current, counter-current, or staged in stirred tanks, with countercurrent being preferred.

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT 628-13-7D, Pyridinium chloride, N-Hexyl 1124-64-7, N-Butylpyridinium chloride 79917-90-1, 1-Butyl-3-methylimidazolium chloride 171058-17-6, 1-Hexyl-3-methylimidazolium chloride
RL: FMU (Formation, unclassified); NUU (Other use, unclassified); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent);

USES (Uses)
(formation of ionic liquid with fluoroborate or fluorophosphate ; removal of mercaptans from hydrocarbon streams using ionic liqs.)
IT 3317-67-7, Cobalt phthalocyanine
RL: CAT (Catalyst use); NUU (Other use, unclassified); USES (Uses)
(removal of mercaptans from hydrocarbon streams using ionic liqs.)

L6 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:290398 CAPLUS
DN 137:87446
TI A novel phthalocyanine-based dimer linked by a silver ion: structural control of self-assembled dimers
AU Ishii, Kazuyuki; Watanabe, Yoko; Abiko, Satoko; Kobayashi, Nagao
CS Department of Chemistry, Graduate School of Science, Tohoku University, Sendai, 980-8578, Japan
SO Chemistry Letters (2002), (4), 450-451
CODEN: CMLTAG; ISSN: 0366-7022
PB Chemical Society of Japan
DT Journal
LA English
OS CASREACT 137:87446
AB A novel phthalocyanine-based dimer, which is a dinuclear pyridino-tri-tert-butylbenzotetraazaporphinatozinc linked by a Ag ion, was synthesized to control the states of assembly and characterized using electronic absorption and MCD spectroscopy.
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI A novel phthalocyanine-based dimer linked by a silver ion: structural control of self-assembled dimers
AB A novel phthalocyanine-based dimer, which is a dinuclear pyridino-tri-tert-butylbenzotetraazaporphinatozinc linked by a Ag ion, was synthesized to control the states of assembly and. . .
IT Magnetic circular dichroism
(of self-assembled phthalocyanine-based dimer linked by silver ion)
IT UV and visible spectra
(of self-assembled phthalocyanine-based dimers with/without silver ion)
IT Self-assembly
(structural control of self-assembled phthalocyanine-based dimers)
IT 440646-00-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(for preparation of self-assembled phthalocyanine-based dimers with/without silver ion)
IT 440645-99-8
RL: FMU (Formation, unclassified); PRP (Properties); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)
(formation, electronic spectrum and reaction with silver fluorophosphate)

L6 ANSWER 5 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2001:124035 CAPLUS
DN 134:167003
TI Lead-free low-melting point glass having good optical functionality
IN Lin, Hung; Yokoo, Toshinobu; Takahashi, Masahide
PA Kansai Shingijutsu Kenkyusho K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent

LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | JP 2001048575 | A | 20010220 | JP 1999-217103 | 19990730 |
| PRAI | JP 1999-217103 | | 19990730 | | |

AB The glass contains P205 5-90, SnF2 8-93, SnO 0-93, and ZnF2 0-10 mol%. Preferably, the glass further contains organic compound having optical transition property and/or an organic compound having non-linear optical property.
ST optical part tin zinc fluorophosphate glass
IT Fluoride glasses
Phosphate glasses
RL: DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(fluorophosphate; lead-free low-m.p. glass having good optical functionality)
IT 574-93-6, Phthalocyanine 989-38-8, Rhodamine 6G
RL: MOA (Modifier or additive use); USES (Uses)
(glass containing; lead-free low-m.p. glass having good optical functionality)

L6 ANSWER 6 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2001:88887 CAPLUS
DN 134:302097
TI The electrochemistry of platinum phthalocyanine microcrystals. II. A microelectrode observation of nucleation-growth controlled solid-solid phase transformations in non-aqueous solvent
AU Jiang, J.; Kucernak, A.
CS Department of Chemistry, Imperial College, London, SW7 2AZ, UK
SO Electrochimica Acta (2001), 46(8), 1223-1231
CODEN: ELCAAV; ISSN: 0013-4686
PB Elsevier Science Ltd.
DT Journal
LA English
AB The solid-solid phase transformations and switching reactions occurring in platinum phthalocyanine (PtPc) microcrystals were studied by chronoamperometry on a microelectrode in acetonitrile containing 0.1 mol dm-3 of the tetrabutylammonium salt of either BF4-, C104- or PF6-. Three different states of the PtPc film (reduced, conductive and over-doped) can be demarcated, depending on its degree of oxidation The transient response seen is dependent upon the initial and final state of the film. For the reduced film, a nucleation-growth process occurs in the film upon the application of an oxidative potential step to >0.50 V. If the end-point of the potential step is increased past 0.75 V, a 2nd nucleation-growth process occurs leading to the conductive film. Both of these processes are controlled by a solid-solid phase transformation. At potentials .gtorsim.1.1 V there is evidence of a further diffusion-controlled reaction, giving the over-doped film. Oxidation or reduction of the conductive film occurs quickly and appears to be diffusion controlled with no indications of a peak or shoulder in the current-time transients. Reduction of the over-doped film, appears to be controlled by one and possibly two nucleation-growth processes as evidenced by peaks in the chronoamperometric transient. The kinetics of solid-solid phase transformation and the switching reaction is only affected slightly by the nature of the anions present.
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI The electrochemistry of platinum phthalocyanine microcrystals. II. A microelectrode observation of nucleation-growth controlled

solid-solid phase transformations in non-aqueous solvent
AB The solid-solid phase transformations and switching reactions occurring in platinum phthalocyanine (PtPc) microcrystals were studied by chronoamperometry on a microelectrode in acetonitrile containing 0.1 mol dm-3 of the tetrabutylammonium salt of. . .
ST microelectrode study nucleation growth controlled solid phase transformation; platinum phthalocyanine microcrystal microelectrode chronoamperometry solid phase transformation switching
IT Electrochromic materials
(Pt phthalocyanine)
IT Films
(elec. conductive; Pt phthalocyanine on carbon microelectrodes)
IT Redox reaction
(electrochem.; of Pt phthalocyanine on carbon fiber microelectrode in MeCN containing tetrabutylammonium salts: microelectrode observation of nucleation-growth controlled solid-solid phase transformations in non-aqueous solvent)
IT Electric conductors
(films; Pt phthalocyanine on carbon microelectrodes)
IT Crystal nucleation
(in solid-solid phase transformations of Pt phthalocyanine on microelectrodes in MeCN containing tetrabutylammonium salts)
IT Carbon fibers, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(microelectrode with attached Pt phthalocyanine: solid-solid phase transformations and switching reactions occurring in Pt phthalocyanine microcrystals studied by chronoamperometry on microelectrode in MeCN containing tetrabutylammonium salts)
IT Oxidation, electrochemical
Reduction, electrochemical
(of Pt phthalocyanine on carbon fiber microelectrode in MeCN containing tetrabutylammonium salts: microelectrode observation of nucleation-growth controlled solid-solid phase transformations in non-aqueous solvent)
IT Cyclic voltammetry
(of Pt phthalocyanine on carbon microelectrodes in MeCN containing tetrabutylammonium salts)
IT Chronoamperometry
Electric switching
Structural phase transition
(solid-solid phase transformations and switching reactions occurring in Pt phthalocyanine microcrystals studied by chronoamperometry on microelectrode in MeCN containing tetrabutylammonium fluoroborate or perchlorate or fluorophosphate)
IT 7440-44-0, Carbon, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(cyclic voltammetry of Pt phthalocyanine on carbon microelectrodes in MeCN containing tetrabutylammonium salts)
IT 429-42-5, Tetrabutylammonium tetrafluoroborate 1923-70-2, Tetrabutylammonium perchlorate 3109-63-5, Tetrabutylammonium hexafluorophosphate
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(solid-solid phase transformations and switching reactions occurring in Pt phthalocyanine microcrystals studied by chronoamperometry on microelectrode in MeCN containing)
IT 14075-08-2, Platinum phthalocyanine
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(solid-solid phase transformations and switching reactions occurring in

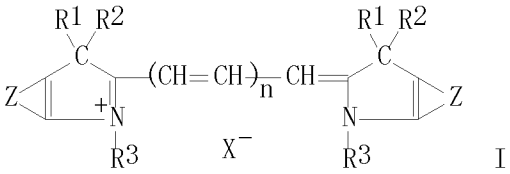
Pt phthalocyanine microcrystals studied by chronoamperometry on microelectrode in MeCN containing tetrabutylammonium fluoroborate or perchlorate or fluorophosphate)

L6 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1997:461280 CAPLUS
DN 127:183663
OREF 127:35469a,35472a
TI One-dimensional staircase aggregates in crystals of 1,7-bis(dimethylamino)heptamethinium hexafluorophosphate, a polymethine dye
AU Dahne, L.; Zobel, D.; Reck, G.
CS Institut Physikalische Chemie, Freie Universitat Berlin, Berlin, D-14195, Germany
SO Zeitschrift fuer Kristallographie (1997), 212(7), 529-531
CODEN: ZEKRDZ; ISSN: 0044-2968
PB Oldenbourg
DT Journal
LA English
AB The title compound C11H19N2.PF6 crystallizes in the monoclinic space group C2/m, a 1234.4, b 942.8, c 717.6 pm, β 109.95° , Z = 2, and dc = 1.372, R = 0.08 and wR2 = 0.2655 for 627 reflections with I > 2σ(I) at 298 K. Atomic coordinates are given. The cation as well as the anion are disordered. A polarization of the polymethine system by the counterion is not observed, because the dye mol. exhibits a sym. polymethine structure. The chromophores are closely stacked in 1D staircase aggregates which are separated by the counterions. Their parallel arrangement in the unit cell should lead to only one transition dipole moment.
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
ST mol structure heptamethinium fluorophosphate dye; polymethine dye crystal mol structure
IT Cyanine dyes
(crystal and mol. structure of bis(dimethylamino)heptamethinium hexafluorophosphate)

L6 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1994:446722 CAPLUS
DN 121:46722
OREF 121:8263a,8266a
TI Optical image-recording sheet
IN Hosoda, Yukio; Furusawa, Makoto
PA Oji Paper Co, Japan
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI JP 05173282 | A | 19930713 | JP 1991-339184 | 19911224 |
| PRAI JP 1991-339184 | | 19911224 | | |

GI




I

AB In the title optical recording sheet comprising on its sheet support a recording layer containing a photo-cationic reaction initiator, a sensitizing dye, and a color forming dye, the above photo-cationic reaction initiator is a Fe-arene type compound, and the sensitizing dye is a cyanine type one I [R1-3 = H, halo, NO2, CN, sulfo, carboxy, alkyl, alkene group, alkane group, alkoxy, alkylhydroxy, arylalkyl, intramol. anionic function group derived from a sulfonic acid or carboxylic acid; n = 0-4; Z = aromatic ring; X = perchlorate, Br, I, tosylate, fluorophosphate, fluoroborate, fluoroantimonate, triflate, fluoroarsenate]. Images can be produced on the above image-recording layer through direct writing with a laser beam.

AB . . . a color forming dye, the above photo-cationic reaction initiator is a Fe-arene type compound, and the sensitizing dye is a cyanine type one I [R1-3 = H, halo, NO2, CN, sulfo, carboxy, alkyl, alkene group, alkane group, alkoxy, alkylhydroxy, arylalkyl, intramol.. . . from a sulfonic acid or carboxylic acid; n = 0-4; Z = aromatic ring; X = perchlorate, Br, I, tosylate, fluorophosphate, fluoroborate, fluoroantimonate, triflate, fluoroarsenate]. Images can be produced on the above image-recording layer through direct writing with a laser beam.

L6 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1992:419566 CAPLUS
DN 117:19566
OREF 117:3355a,3358a
TI Evaluation of an interdigitated gate electrode field-effect transistor for detecting organophosphorus compounds
AU Brothers, C. P.
CS Sch. Eng., Air Force Inst. Technol., Wright-Patterson AFB, OH, USA
SO Report (1990), AFIT/GE/ENG/90D-07; Order No. AD-A230 161, 247 pp. Avail.: NTIS
From: Gov. Rep. Announce. Index (U. S.) 1991, 91(12), Abstr. No. 131,866
DT Report
LA English
AB This study used integrated circuit microsensors to detect organophosphorus compds. Chemical-sensitive thin films, copper phthalocyanine, DFPase, succinyl chloride, succinylcholine chloride, 2-naphthol(B), and L-histidine dihydrochloride, were deposited on interdigitated gate electrode (IGE) structures, with an average thickness of 2000 A. Thin film elec. performance characteristics were measured for several parameters, including: dc resistance, ac impedance, time-domain, and spectral responses from 10 Hz to 1 MHz. Each microsensor contained nine IGEs; each IGE possessed an in situ field-effect transistor amplifier. After purging each sensor with filtered air, it was exposed to one or two of the following gases: diisopropyl fluorophosphate (DFP), diisopropylmethylphosphonate, and di-Me methylphosphonate at concns. spanning 100 ppb to 10 ppm (at 90% relative humidity). Testing was conducted with microsensors heated to 30° ,50° ,and 70° . All six candidate films, demonstrated various degrees of sensitivity to the challenge gases at 30° . DFPase was especially sensitive to the challenge gases at 100 ppb. Only copper phthalocyanine and L-histidine dihydrochloride demonstrated sensitivity above 30° . In particular 2-naphthol(B) showed complete reversibility and succinyl chloride demonstrated partial reversibility at 30° . Copper phthalocyanine was reversible only at 70° . Succinylcholine chloride demonstrated a unique band-reject filter response to the presence of DFP in any challenge gas sample.
AB This study used integrated circuit microsensors to detect organophosphorus compds. Chemical-sensitive thin films, copper phthalocyanine, DFPase, succinyl chloride, succinylcholine chloride, 2-naphthol(B), and

L-histidine dihydrochloride, were deposited on interdigitated gate electrode (IGE) structures, with an average. . . amplifier. After purging each sensor with filtered air, it was exposed to one or two of the following gases: diisopropyl fluorophosphate (DFP), diisopropylmethylphosphonate, and di-Me methylphosphonate at concns. spanning 100 ppb to 10 ppm (at 90% relative humidity). Testing was conducted. . . sensitivity to the challenge gases at 30° . DFPase was especially sensitive to the challenge gases at 100 ppb. Only copper phthalocyanine and L-histidine dihydrochloride demonstrated sensitivity above 30° . In particular 2-naphthol(B) showed complete reversibility and succinyl chloride demonstrated partial reversibility at 30° . Copper phthalocyanine was reversible only at 70° . Succinylcholine chloride demonstrated a unique band-reject filter response to the presence of DFP in any. . .

IT 71-27-2, Succinylcholine chloride 135-19-3, 2-Naphthol, analysis 147-14-8, Copper phthalocyanine 543-20-4, Succinyl chloride 6027-02-7, L-Histidine dihydrochloride 9032-18-2, DFPase
RL: ANST (Analytical study)
(interdigitated gate electrode coated with, in integrated circuit microsensors for detection of organophosphorus compds.)

L6 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1990:643335 CAPLUS
DN 113:243335
OREF 113:40799a,40802a
TI Line-shape analysis of the carbon-13 Overhauser shift in organic conductors and semiconductors
AU Gotschy, B.; Denninger, G.
CS Phys. Inst., Univ. Bayreuth, Bayreuth, D-8580, Germany
SO Molecular Physics (1990), 71(1), 169-80
CODEN: MOPHAM; ISSN: 0026-8976
DT Journal
LA English
AB In organic conductors such as (fluoranthene)2PF6 or pyrene radical-cation salts, and organic semiconductors such as lithium phthalocyanine, a shift of the conduction-ESR (CESR) frequency is observed This so-called Overhauser shift is significant compared with the CESR linewidth and is caused by the averaged hyperfine interaction between the conduction electrons and the nuclei. This shift can be measured using a double-resonance method, and it can be enhanced by two or three orders of magnitude by partially saturating the CESR. It provides a sensitive probe for the detection of NMR. The measurements of the 13C induced Overhauser shift are reported. By means of a lineshape anal. of the 13C resonance curves, we investigated the distribution of the conduction electrons over these mol. systems.
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
AB In organic conductors such as (fluoranthene)2PF6 or pyrene radical-cation salts, and organic semiconductors such as lithium phthalocyanine, a shift of the conduction-ESR (CESR) frequency is observed This so-called Overhauser shift is significant compared with the CESR linewidth. . .
IT Overhauser effect
(of fluoranthene fluorophosphate conduction ESR, carbon-13-induced)

L6 ANSWER 11 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1990:480503 CAPLUS
DN 113:80503
OREF 113:13616h,13617a
TI Carrying out solvent-free organic and inorganic reactions in extruders
AU Kochmann, Werner; Pieschel, Friedemann; Lange, Eckehard; Reinholz, Siegfried

CS VEB Chemiekomb., Bitterfeld, DDR-4400, Ger. Dem. Rep.
SO Mitteilungsblatt - Chemische Gesellschaft der Deutschen Demokratischen Republik (1990), 37(4), 74-9
CODEN: CGDMBG; ISSN: 0411-8987
DT Journal; General Review
LA German
AB A review with no refs. dealing with examples for extruder use in the solvent-free production of phthalocyanine, gamma acid, sulfanilic acid, azo dye intermediates, sulfur dyes, and K2PO3F.
AB A review with no refs. dealing with examples for extruder use in the solvent-free production of phthalocyanine, gamma acid, sulfanilic acid, azo dye intermediates, sulfur dyes, and K2PO3F.
ST review solvent free dye manuf; extrusion reaction org inorg review; potassium fluorophosphate prodn review
IT 90-51-7P 121-57-3P 574-93-6P, 29H,31H-Phthalocyanine 14104-28-0P
RL: PREP (Preparation)
(production of, use of extruders in)

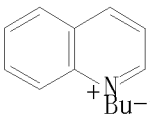
L6 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1988:601955 CAPLUS
DN 109:201955
OREF 109:33249a,33252a
TI Crystal structure of hexaazaoctadecahydrocoronene dication [HAOC]2+, a singlet benzene dication
AU Miller, Joel S.; Dixon, David A.; Calabrese, Joseph C.
CS Cent. Res. Dev. Dep., E. I. du Pont de Nemours and Co., Inc., Wilmington, DE, 19898, USA
SO Science (Washington, DC, United States) (1988), 240(4856), 1185-8
CODEN: SCIEAS; ISSN: 0036-8075
DT Journal
LA English
AB HAOC (hexaazaoctadecahydrocoronene) at -70° is monoclinic, space group P21/c, with a 9.784(2), b 9.384(4), c 9.614(8) Å, and β 117.54(3)° ;Z = 2; Rw = 5.3%. HAOC was oxidized with Ag+ to [HAOC]2+; the 1:2 salts with [BF4]- and [PF6]- are monoclinic, space group P21/n, a 6.604(1), b 10.929(2), c 14.255(3) Å, β 91.33(1)° ;Z = 2, Rw = 4.3% and triclinic, space group P.hivin.1, a 6.666(2), b 8.915(1), c 10.632(2) Å, α 100.45(1), β 108.82(2), γ 105.09(1)° ,Z = 2, Rw = 4.3%, resp. Although HAOC is aromatic, its dication has a localized structure that is based upon Jahn-Teller-distorted cyanine/p-phenylenediammonium fragments. The structure is consistent with the singlet ground state as determined by magnetic susceptibility and contrasts with the simplest Hueckel expectation of a triplet ground state.
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
AB . . . 2, Rw = 4.3%, resp. Although HAOC is aromatic, its dication has a localized structure that is based upon Jahn-Teller-distorted cyanine/p-phenylenediammonium fragments. The structure is consistent with the singlet ground state as determined by magnetic susceptibility and contrasts with the simplest. . .
ST electrochem oxidn hexaazaoctadecahydrocoronene; mol structure hexaazaoctadecahydrocoronene cation salt; magnetic susceptibility hexaazaoctadecahydrocoronene salt; fluorophosphate hexaazaoctadecahydrocoronene cation structure; phosphate fluoro hexaazaoctadecahydrocoronene cation structure; borate fluoro hexaazaoctadecahydrocoronene cation structure

L6 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1987:166127 CAPLUS
DN 106:166127

OREF 106:26851a,26854a
TI Toners for electrostatic image development
IN Tanaka, Katsuhiko; Fukumoto, Hiroshi
PA Canon K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 61194452 | A | 19860828 | JP 1985-34529 | 19850225 |
| JP 07031413 | B | 19950410 | | |

PRAI JP 1985-34529 19850225
GI



I

AB The title toners contain a quinolinium salt having BF4- or PF6- as the counter ion to give stable and adequate triboelec. charge, sharp charge distribution, and high d. images without fog and to exhibit good durability, environmental stability, storage stability, fixability, and antioffset properties. A mixture of Bu acrylate-styrene copolymer 100, Mitsubishi #44 (C black) 10, low mol. weight polyethylene wax 2, and I 2 parts was kneaded, pulverized, and then mixed with an Fe powder to give an electrostatog. developer, which showed good performance as compared to a control containing a nigrosine dye instead of I.
ST quinolinium salt toner electrostatog; fluoroborate ion salt toner electrostatog; fluorophosphate ion salt toner electrostatog; charge control agent toner electrostatog
IT 147-14-8, Copper phthalocyanine blue 25767-47-9, Butyl acrylate-styrene copolymer
RL: USES (Uses)
(electrostatog. developer with toner containing quinolinium tetrafluoroborate or hexafluorophosphate and, for improved charging characteristics)

L6 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1985:159444 CAPLUS
DN 102:159444
OREF 102:24929a,24932a
TI Partially oxidized Group 3A fluorometallophthalocyanines
AU Brant, Patrick; Weber, David C.; Haupt, Steven G.; Nohr, Ronald S.; Wynne, Kenneth J.
CS Chem. Div., Nav. Res. Lab., Washington, DC, 20375, USA
SO Journal of the Chemical Society, Dalton Transactions: Inorganic Chemistry (1972-1999) (1985), (2), 269-74
CODEN: JCDTBI; ISSN: 0300-9246
DT Journal
LA English
AB The F-bridged polymeric complexes (MLF)n (M = Al, Ga; H2L = phthalocyanine) react smoothly with NOZ (Z = BF4, PF6) in dry MeNO2 or CH2Cl2 to give partially oxidized products MLFZx (I; 0 < x < 0.9). Pressed pellets of I have conductivities ≤ 10 Ω-1 cm-1, which are maintained indefinitely in ambient air. I are thermally

stable up to .apprx.150° ;primary decomposition products are fluorinated organic compds. and anion fragments. New x-ray powder diffraction lines for I correspond to some disruption of the original crystal lattice. The intensity of a broad electronic transition in the IR spectra of I increases with increasing dopant concentration I all contain delocalized unpaired spins whereas (MLF)n are diamagnetic. Spin densities in I at room temperature are 0.005-0.18 spins per dopant mol. Pauli-like behavior with a Curie tail, and antiferromagnetic behavior were detected for different I. The x-ray photoelectron spectra of I are consistent with delocalized pos. charges (holes) on the phthalocyanine rings. The dopant anions are located inside channels created by the surrounding macrocycles.

TI Partially oxidized Group 3A fluorometallophthalocyanines

AB The F-bridged polymeric complexes (MLF)n (M = Al, Ga; H2L = phthalocyanine) react smoothly with NOZ (Z = BF4, PF6) in dry MeNO2 or CH2Cl2 to give partially oxidized products MLFZx (I;. . . were detected for different I. The x-ray photoelectron spectra of I are consistent with delocalized pos. charges (holes) on the phthalocyanine rings. The dopant anions are located inside channels created by the surrounding macrocycles.

ST aluminum phthalocyanine fluoro fluoroborato; gallium phthalocyanine fluoro fluoroborato; fluorophosphate phthalocyanine aluminum; cond aluminum gallium phthalocyanine complex; magnetism aluminum gallium phthalocyanine complex; ESR aluminum gallium phthalocyanine complex

IT Krogmann salts
RL: RCT (Reactant); RACT (Reactant or reagent)
(aluminum and gallium fluoro phthalocyanine complexes)

L6 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1984:28392 CAPLUS

DN 100:28392

OREF 100:4357a,4360a

TI Resistivity of doped phthalocyanines to 6.5 GPa

AU Webb, A. W.; Brant, P.; Nohr, R. S.; Weber, D. C.

CS Nav. Res. Lab., Washington, DC, 20375, USA

SO Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1982), 23(1), 127-8
CODEN: ACPPAY; ISSN: 0032-3934

DT Journal

LA English

AB The elec. resistivities (p') of PcAlF and PcGaF (H2Pc = phthalocyanine) were decreased by doping with I, BF4-, PF6-, and SbF6-; the p' of the doped samples decreased with increasing pressure. Data are also given for PcAl(OH) and PcAlCl, doped with PF6-.

TI Resistivity of doped phthalocyanines to 6.5 GPa

AB The elec. resistivities (p') of PcAlF and PcGaF (H2Pc = phthalocyanine) were decreased by doping with I, BF4-, PF6-, and SbF6-; the p' of the doped samples decreased with increasing pressure.. . .

ST fluoroaluminum phthalocyanine resistivity pressure; fluorogallium phthalocyanine resistivity pressure; gallium fluoride phthalocyanine resistivity pressure; aluminum fluoride phthalocyanine resistivity pressure; chloroaluminum phthalocyanine resistivity pressure; hydroxyaluminumn phthalocyanine resistivity pressure; phthalocyanine compd resistivity pressure; iodine doped phthalocyanine compd resistivity; fluoroborate doped phthalocyanine compd; fluorophosphate doped phthalocyanine compd; fluoroantimonate doped phthalocyanine compd resistivity; boron fluoride phthalocyanine compd resistivity; phosphorus fluoride

```
     phthalocyanine compd resistivity; antimony fluoride
     phthalocyanine compd resistivity; elec resistivity
     phthalocyanine deriv pressure
IT   Piezoresistance
        (of doped phthalocyanine compds., pressure dependence of)
IT   14874-70-5   16919-18-9   17111-95-4
     RL: USES (Uses)
        (elec. resistivity of phthalocyanine compds. doped with,
        pressure dependence of)
IT   7553-56-2, properties
     RL: PRP (Properties)
        (elec. resistivity of phthalocyanine compds. doped with,
        pressure dependence of)

L6   ANSWER 16 OF 16  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   1966:411628  CAPLUS
DN   65:11628
OREF 65:2082c-e
TI   Kinetics of the hydrolysis of organophosphorus compounds
AU   Uhlik, B.; Weber, K.
CS   Vet. Inst., Zagreb, Yugoslavia
SO   Arhiv Hig. Rada Toksikol. (1965), 16(4), 329-42
DT   Journal
LA   Unavailable
AB   Hydrolysis of sarin (I), tabun (II), and diisopropyl
     fluorophosphate (III) were studied at 25, 35, and 45° ,and
     at 5 + 10-3 volume% concentration of the substances.  The concentration of the
     compds. during the hydrolysis was followed by photoelec. measurements of
     the fluorescence intensity.  The hydrolysis rate of the compds. decreased
     in the order II > III > I.  The rates of hydrolysis for all 3 compds.
     increased with an increase of the temperature and decreased in the presence of
     MeOH, EtOH, and iso-PrOH.  The inhibiting effect of the alcs. increased
     with their concentration in solution and with their mol. weight  Under similar
     conditions, the inhibiting effect on the hydrolysis decreased in the order
     III > I > II.  The hydrolysis rate of I increased with the acidity of the
     solution PhNH2, KI, and Br at concentration 10-6 to 10-4 mole in the reaction mixture
     increased the hydrolysis rate of I.  KI and PhOH had no effect on the
     hydrolysis rate.  The van't Hoff temperature quotients, Q10, were 2.951, 2.501,
     3.100, and the activation energy 19,660, 16.807, and 20.810 cal./mole for
     I, II, and III, resp.  Decrease of pH lowered the temperature quotients and the
     activation energy of the hydrolysis of I.  The hydrolysis reactions of all
     compds. at all temps. were 1st order.  The half-decay time did not depend
     on the concentration of the compound at the beginning of the reaction.
AB   Hydrolysis of sarin (I), tabun (II), and diisopropyl
     fluorophosphate (III) were studied at 25, 35, and 45° ,and
     at 5 + 10-3 volume% concentration of the substances.  The concentration.  .  .
IT   Aniline, reaction products with HCHO, ruthenium complex with
        phthalocyanine
        (sarin hydrolysis in presence of)


=> f hid
           800 HID
            87 HIDS
L7         881 HID
                (HID OR HIDS)

=> del 17
DELETE L7? (Y)/N:y

=> d his
```

```
     (FILE 'HOME' ENTERED AT 14:51:05 ON 17 AUG 2009)

     FILE 'REGISTRY' ENTERED AT 14:51:18 ON 17 AUG 2009
L1              STRUCTURE UPLOADED
L2            0 S L1
L3            1 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 14:52:36 ON 17 AUG 2009
L4            1 S L3
L5         6605 S FLUOROALKYLPHOSPHATE? OR FLUOROPHOSPHATE?
L6           16 S L5 AND ?CYANINE?

=> s l5 and polymethine
           2952 POLYMETHINE
            261 POLYMETHINES
           3019 POLYMETHINE
                  (POLYMETHINE OR POLYMETHINES)
L7            2 L5 AND POLYMETHINE

=> d 1-2 bib abs

L7   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   1998:162756  CAPLUS
DN   128:263170
OREF 128:51985a,51988a
TI   Electrochemical oxidation of hexakis(dimethylamino)benzene
AU   Speiser, Bernd; Wurde, Marc; Maichle-Mossmer, Cacilia
CS   Institut fur Organische Chemie, Universitat Tubingen, Tubingen, D-72076,
     Germany
SO   Chemistry--A European Journal (1998), 4(2), 222-233
     CODEN: CEUJED; ISSN: 0947-6539
PB   Wiley-VCH Verlag GmbH
DT   Journal
LA   English
AB   Hexakis(dimethylamino)benzene is anodically oxidized to its chemical stable
     dication in an electrochem. slow two-electron process.  This redox process
     was characterized by cyclic voltammetry, chronoamperometry,
     chronocoulometry, and bulk electrolysis with isolation of the
     bis(hexafluorophosphate) of the dication.  The crystal structure of this
     dication salt shows considerable distortion, in accord with earlier
     results for the bis(triiodide).  The sluggishness of the electron transfer
     is related to structural changes during oxidation: two noncoplanar
     polymethine systems coupled by two long C-C single bonds form.
     The thermodn. of the oxidation was characterized by inversion of potentials
     and disproportionation of a hypothetical radical cation.  In contrast to
     earlier reports, no particular destabilization of the dication is assumed.
     Further oxidation of the dication proceeds via a tri- to a tetracation in two
     steps.  The tri- and tetracations undergo chemical follow-up reactions.
OSC.G   30    THERE ARE 30 CAPLUS RECORDS THAT CITE THIS RECORD (30 CITINGS)
RE.CNT  59    THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   1997:461280  CAPLUS
DN   127:183663
OREF 127:35469a,35472a
TI   One-dimensional staircase aggregates in crystals of
     1,7-bis(dimethylamino)heptamethinium hexafluorophosphate, a
     polymethine dye
AU   Dahne, L.; Zobel, D.; Reck, G.
```

CS Institut Physikalische Chemie, Freie Universitat Berlin, Berlin, D-14195, Germany
SO Zeitschrift fuer Kristallographie (1997), 212(7), 529-531
CODEN: ZEKRDZ; ISSN: 0044-2968
PB Oldenbourg
DT Journal
LA English
AB The title compound C11H19N2.PF6 crystallizes in the monoclinic space group C2/m, a 1234.4, b 942.8, c 717.6 pm, β 109.95° , Z = 2, and dc = 1.372, R = 0.08 and wR2 = 0.2655 for 627 reflections with I > 2σ(I) at 298 K. Atomic coordinates are given. The cation as well as the anion are disordered. A polarization of the polymethine system by the counterion is not observed, because the dye mol. exhibits a sym. polymethine structure. The chromophores are closely stacked in 1D staircase aggregates which are separated by the counterions. Their parallel arrangement in the unit cell should lead to only one transition dipole moment.
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> => d que l14 stat
L8 51 SEA FILE=CAPLUS ABB=ON PLU=ON ("IGNATYEV N V"/AU OR "IGNATYEV NICOLAI"/AU OR "IGNATYEV NIKOLAI"/AU OR "IGNATYEV NIKOLAI V"/AU)
L9 228 SEA FILE=CAPLUS ABB=ON PLU=ON "WILLNER HELGE"/AU
L10 36 SEA FILE=CAPLUS ABB=ON PLU=ON ("FINZE M"/AU OR "FINZE MAIK"/AU)
L11 50 SEA FILE=CAPLUS ABB=ON PLU=ON ("BERNHARDT E O"/AU OR "BERNHARDT E S"/AU OR "BERNHARDT EDUARD"/AU)
L12 23 SEA FILE=CAPLUS ABB=ON PLU=ON ("KUCHERYNA ANDRIY"/AU OR "KUCHERYNA ANDRIY I"/AU OR "KUCHERYNA ANDRY"/AU)
L13 282 SEA FILE=CAPLUS ABB=ON PLU=ON L8 OR L9 OR L10 OR L11 OR L12
L14 3 SEA FILE=CAPLUS ABB=ON PLU=ON L13 AND (POLYMETHINE OR ?CYANINE?)

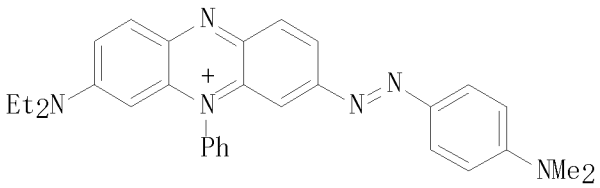
=> d 1-3 bib abs

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:959665 CAPLUS
DN 143:249722
TI Imides of cationic dyes.
IN Ignatyev, Nikolai; Welz-biermann, Urs; Kucheryna, Andriy ; Willner, Helge
PA Merck Patent GmbH, Germany
SO Ger. Offen., 55 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | DE 102004007611 | A1 | 20050901 | DE 2004-102004007611 | 20040217 |
| | EP 1660591 | A1 | 20060531 | EP 2004-763390 | 20040722 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| | JP 2007503477 | T | 20070222 | JP 2006-523551 | 20040722 |
| | US 20080275224 | A1 | 20081106 | US 2006-568526 | 20060217 |
| PRAI | DE 2003-10338834 | A | 20030821 | | |
| | DE 2003-10338933 | A | 20030821 | | |
| | DE 2003-10357359 | A | 20031209 | | |

| | | | |
|---|---|---|---|
| | DE 2003-10357360 | A | 20031209 |
| | DE 2004-102004007610 | A | 20040217 |
| | DE 2004-102004007611 | A | 20040217 |
| | WO 2004-EP8174 | W | 20040722 |

GI



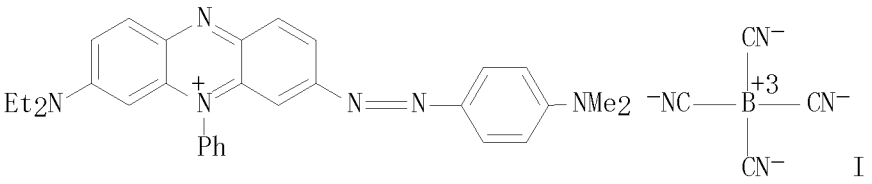
I

AB Electrochem., thermal and hydrolysis-stable imides of cationic dyes comprising anion [(CpF2p+1-mHmXOy)N(CqF2q+1-kHkXOy)]- (X = C or S, p = 0 - 20 and 0 ≤ m ≤ 2p + 1,q = 0 - 20 and 0 ≤ k ≤ y2q + 1, y = 1 or 2, x = 0 - 3) are useful for dyeing fibers, plastics, paper and leather, for production of flexog. printing inks, ball point pen inks and stamp pad inks. Thus, imide I prepared by mixing a solution of 0.43 g Janus Green in 100 mL of water with 0.25 g of lithium bis(trifluoromethanesulfonyl)imide in 5 mL of water with 69.3% yield has a very good solubility in methanol, Et acetate and THF.

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:959664 CAPLUS
DN 143:268287
TI Cyanoborates of cationic dyes.
IN Ignatyev, Nikolai; Welz-biermann, Urs; Kucheryna, Andriy ; Willner, Helge
PA Merck Patent GmbH, Germany
SO Ger. Offen., 51 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | DE 102004007610 | A1 | 20050901 | DE 2004-102004007610 | 20040217 |
| | EP 1660591 | A1 | 20060531 | EP 2004-763390 | 20040722 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| | JP 2007503477 | T | 20070222 | JP 2006-523551 | 20040722 |
| | US 20080275224 | A1 | 20081106 | US 2006-568526 | 20060217 |
| PRAI | DE 2003-10338834 | A | 20030821 | | |
| | DE 2003-10338933 | A | 20030821 | | |
| | DE 2003-10357359 | A | 20031209 | | |
| | DE 2003-10357360 | A | 20031209 | | |
| | DE 2004-102004007610 | A | 20040217 | | |
| | DE 2004-102004007611 | A | 20040217 | | |
| | WO 2004-EP8174 | W | 20040722 | | |

OS MARPAT 143:268287
GI

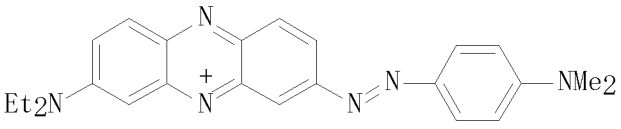


AB Electrochem., thermal and hydrolysis-stable cyano borates of cationic dyes comprising anion [B(CN)yF4-y-xRx]- (y = 1 - 4, x = 0 - 3 and R = H, alkyl, aryl, fluorinated alkyl, fluorinated aryl, cycloalkyl or alkyl aryl) are useful for dyeing fibers, plastics, paper and leather, for production of flexog. printing inks, ball point pen inks and stamp pad inks. Thus, cyano borate I prepared by mixing a solution of 0.49 g Janus Green in 100 mL of water with 0.15 g of K[B(CN)4] in 5 mL of water with 72.4% yield has a very good solubility in methanol, Et acetate and THF.

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:219829 CAPLUS
DN 142:299401
TI Cyanoborate, fluoroalkyl phosphate, fluoroalkyl borate or imide dyes
IN Ignatyev, Nikolai; Welz-Biermann, Urs; Willner, Helge; Finze, Maik; Bernhardt, Eduard; Kucheryna, Andriy
PA Merck Patent GmbH, Germany
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO 2005021661 | A1 | 20050310 | WO 2004-EP8174 | 20040722 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10338933 | A1 | 20050317 | DE 2003-10338933 | 20030821 |
| DE 10338834 | A1 | 20050324 | DE 2003-10338834 | 20030821 |
| DE 10357359 | A1 | 20050707 | DE 2003-10357359 | 20031209 |
| DE 10357360 | A1 | 20050707 | DE 2003-10357360 | 20031209 |
| EP 1660591 | A1 | 20060531 | EP 2004-763390 | 20040722 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| JP 2007503477 | T | 20070222 | JP 2006-523551 | 20040722 |
| US 20080275224 | A1 | 20081106 | US 2006-568526 | 20060217 |
| PRAI DE 2003-10338834 | A | 20030821 | | |
| DE 2003-10338933 | A | 20030821 | | |
| DE 2003-10357359 | A | 20031209 | | |
| DE 2003-10357360 | A | 20031209 | | |
| DE 2004-202004007611 | A | 20040217 | | |
| DE 2004-202004007612 | A | 20040217 | | |
| DE 2004-102004007610 | A | 20040217 | | |

DE 2004-102004007611 A 20040217
WO 2004-EP8174 W 20040722
OS MARPAT 142:299401
GI



B(CN)4 I

AB The title dyes, which are electrochem., thermally, and hydrolytically stable and have good solubility, have cations and anions of specified structure. Adding 0.975 mol K[B(CN)4] in 5 mL H2O to 0.959 mmol Janus green in 100 mL H2O dropwise with stirring gave 72.4% Janus green tetracyanoborate (I).
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d que l20 stat
L17 STR

Structure attributes must be viewed using STN Express query preparation.
L19 564 SEA FILE=REGISTRY SSS FUL L17
L20 407 SEA FILE=CAPLUS ABB=ON PLU=ON L19

=> s l20 and (polymethine? or ?cyanine?)
3112 POLYMETHINE?
73362 ?CYANINE?
L21 1 L20 AND (POLYMETHINE? OR ?CYANINE?)

=> d bib abs hitstr

L21 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:219829 CAPLUS
DN 142:299401
TI Cyanoborate, fluoroalkyl phosphate, fluoroalkyl borate or imide dyes
IN Ignatyev, Nikolai; Welz-Biermann, Urs; Willner, Helge; Finze, Maik; Bernhardt, Eduard; Kucheryna, Andriy
PA Merck Patent GmbH, Germany
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO 2005021661 | A1 | 20050310 | WO 2004-EP8174 | 20040722 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | | |

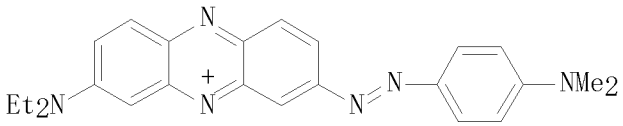
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

| | | | | | |
|---|---|---|---|---|---|
| DE 10338933 | A1 | 20050317 | DE 2003-10338933 | | 20030821 |
| DE 10338834 | A1 | 20050324 | DE 2003-10338834 | | 20030821 |
| DE 10357359 | A1 | 20050707 | DE 2003-10357359 | | 20031209 |
| DE 10357360 | A1 | 20050707 | DE 2003-10357360 | | 20031209 |
| EP 1660591 | A1 | 20060531 | EP 2004-763390 | | 20040722 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | | |
| JP 2007503477 | T | 20070222 | JP 2006-523551 | | 20040722 |
| US 20080275224 | A1 | 20081106 | US 2006-568526 | | 20060217 |

PRAI DE 2003-10338834 A 20030821
DE 2003-10338933 A 20030821
DE 2003-10357359 A 20031209
DE 2003-10357360 A 20031209
DE 2004-202004007611 A 20040217
DE 2004-202004007612 A 20040217
DE 2004-102004007610 A 20040217
DE 2004-102004007611 A 20040217
WO 2004-EP8174 W 20040722

OS MARPAT 142:299401

GI



$Et_2N$ $NMe_2$ $B(CN)_4^-$

I

AB The title dyes, which are electrochem., thermally, and hydrolytically stable and have good solubility, have cations and anions of specified structure. Adding 0.975 mol K[B(CN)4] in 5 mL H20 to 0.959 mmol Janus green in 100 mL H20 dropwise with stirring gave 72.4% Janus green tetracyanoborate (I).

IT 847507-05-5P 847507-06-6P 847507-07-7P
847507-08-8P 847507-09-9P 847507-10-2P
847507-11-3P 847507-12-4P 847507-13-5P
847507-14-6P 847507-15-7P 847507-16-8P
847507-17-9P 847507-18-0P 847507-19-1P
847507-20-4P 847507-21-5P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(cyanoborate, fluoroalkyl phosphate, fluoroalkyl borate or imide dyes)

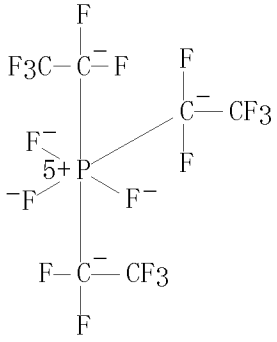
RN 847507-05-5 CAPLUS

CN Phenazinium, 3-(diethylamino)-7-[[4-(dimethylamino)phenyl]azo]-5-phenyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

CM 1

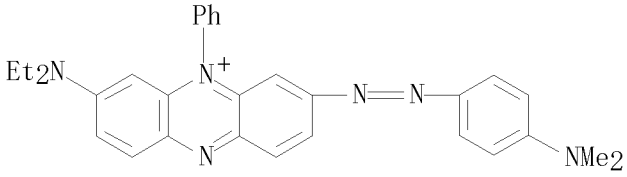
CRN 429679-87-8

CMF C6 F18 P
CCI CCS



CM 2

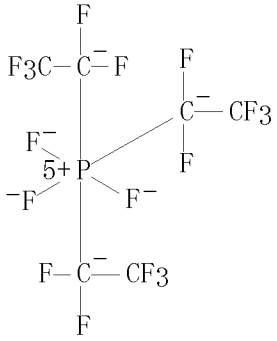
CRN 10390-24-6
CMF C30 H31 N6



RN 847507-06-6 CAPLUS
CN Phenazinium, 3,7-diamino-2,8-dimethyl-5-phenyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

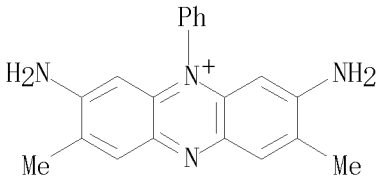
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

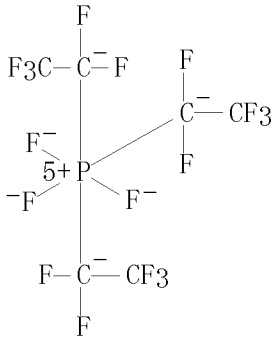
CRN 7006-08-8
CMF C20 H19 N4



RN 847507-07-7 CAPLUS
CN Xanthylium, 9-(2-carboxyphenyl)-3,6-bis(diethylamino)-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

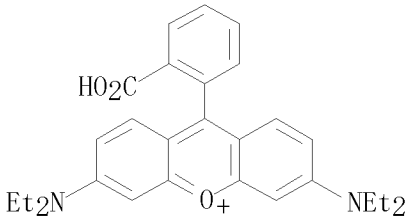
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 64381-98-2
CMF C28 H31 N2 O3

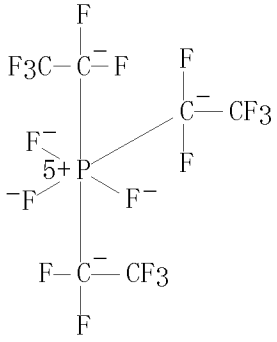


RN 847507-08-8 CAPLUS
CN Xanthylium, 3,6-bis(dimethylamino)-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

CM 1

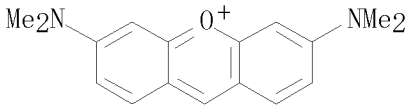
CRN 429679-87-8

CMF C6 F18 P
CCI CCS



CM 2

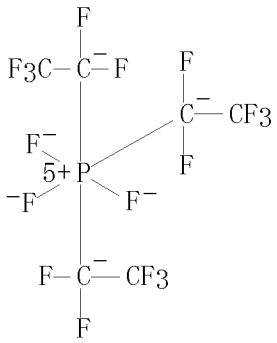
CRN 17817-77-5
CMF C17 H19 N2 O



RN 847507-09-9 CAPLUS
CN Benzo[a]phenoxazin-7-ium, 5-amino-9-(diethylamino)-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

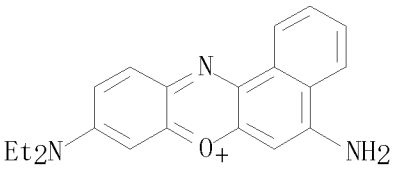
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

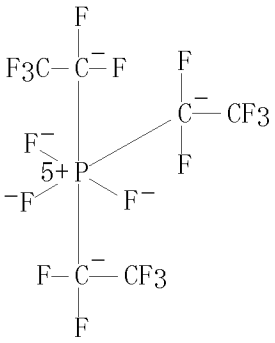
CRN 7481-60-9
CMF C20 H20 N3 O



RN 847507-10-2 CAPLUS
CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

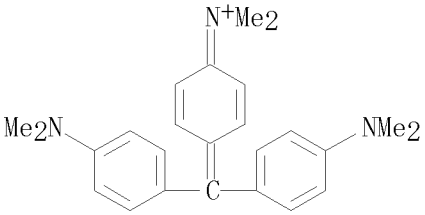
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

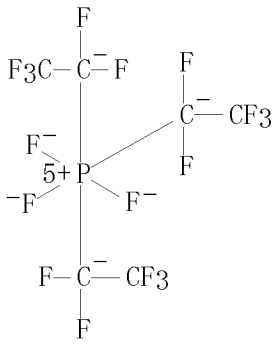
CRN 7438-46-2
CMF C25 H30 N3



RN 847507-11-3 CAPLUS
CN Phenanthridinium, 3,8-diamino-5-ethyl-6-phenyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

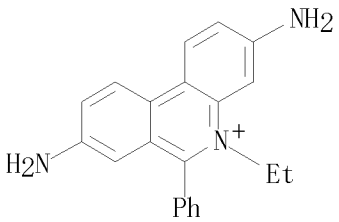
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

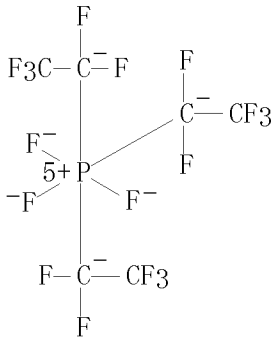
CRN 3546-21-2
CMF C21 H20 N3



RN 847507-12-4 CAPLUS
CN Phenothiazin-5-ium, 3,7-bis(dimethylamino)-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

CM 1

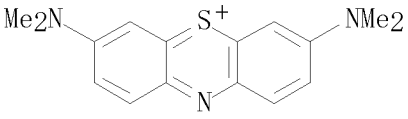
CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 7060-82-4

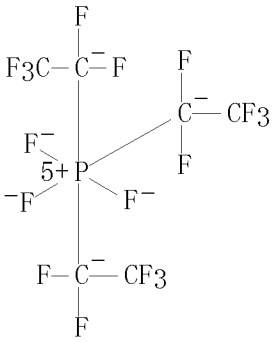
CMF C16 H18 N3 S



RN 847507-13-5 CAPLUS
CN Benzoxazolium, 3-ethyl-2-[5-(3-ethyl-2(3H)-benzoxazolylidene)-1,3-pentadienyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

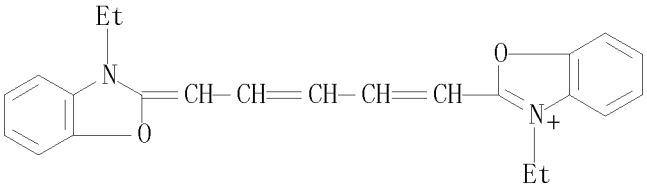
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

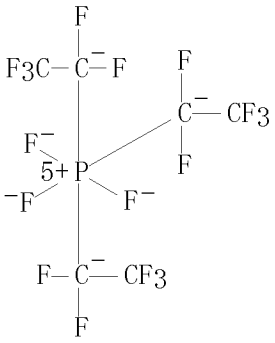
CRN 37069-76-4
CMF C23 H23 N2 O2



RN 847507-14-6 CAPLUS
CN 3H-Indolium, 1,2,3,3-tetramethyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

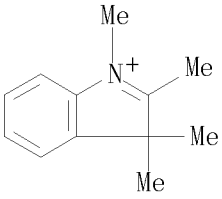
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

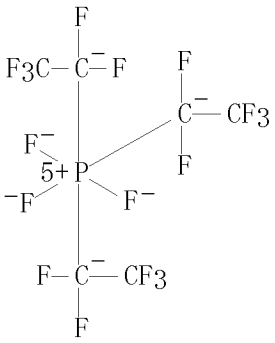
CRN 46149-03-5
CMF C12 H16 N



RN 847507-15-7 CAPLUS
CN Benzothiazolium, 3-ethyl-2-methyl-,
trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

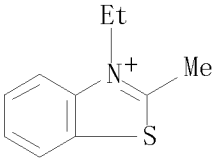
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

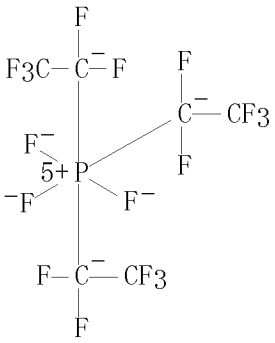
CRN 42846-15-1
CMF C10 H12 N S



RN 847507-16-8 CAPLUS
CN Benzoxazolium, 3-ethyl-2-methyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

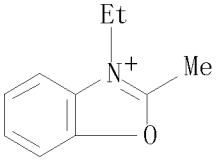
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

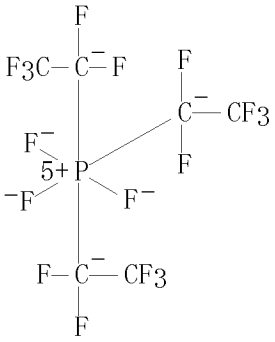
CRN 42846-14-0
CMF C10 H12 N O



RN 847507-17-9 CAPLUS
CN Benzoxazolium, 2,3-dimethyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

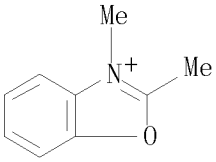
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

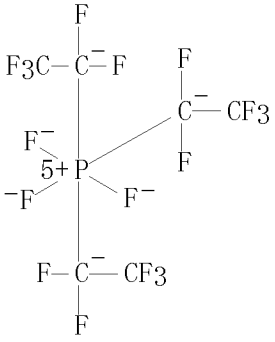
CRN 40265-56-3
CMF C9 H10 N O



RN 847507-18-0 CAPLUS
CN 3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-1,3,3-trimethyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

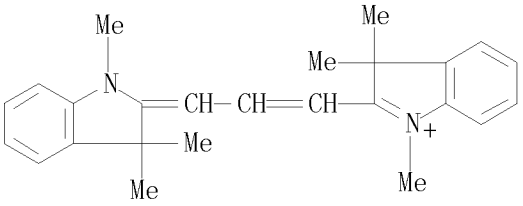
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

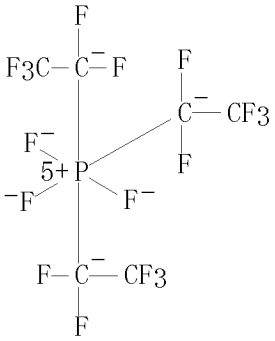
CRN 20766-56-7
CMF C25 H29 N2



RN 847507-19-1 CAPLUS
CN Benzothiazolium, 3-ethyl-2-[3-(3-ethyl-2(3H)-benzothiazolylidene)-1-propenyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

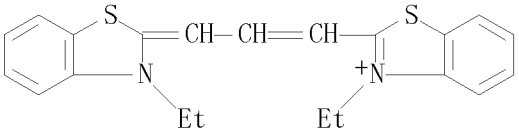
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

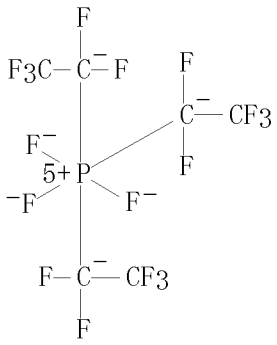
CRN 18403-49-1
CMF C21 H21 N2 S2



RN 847507-20-4 CAPLUS
CN Benzoxazolium, 3-methyl-2-[3-(3-methyl-2(3H)-benzoxazolylidene)-1-propenyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

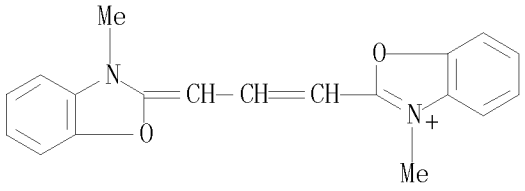
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

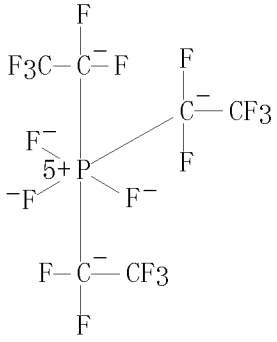
CRN 48198-86-3
CMF C19 H17 N2 02



RN 847507-21-5 CAPLUS
CN 3-Thiophenediazonium, 2-(methoxycarbonyl)-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)

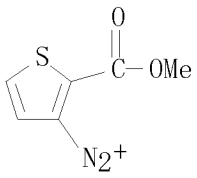
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 100421-49-6
CMF C6 H5 N2 02 S



```
OSC.G   2     THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT  4     THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> d his full

     (FILE 'HOME' ENTERED AT 14:51:05 ON 17 AUG 2009)

     FILE 'REGISTRY' ENTERED AT 14:51:18 ON 17 AUG 2009
L1               STRUCTURE UPLOADED
                 D
L2             0 SEA SSS SAM L1
L3             1 SEA SSS FUL L1
                 D QUE L3 STAT
                 D IDE CAN

     FILE 'CAPLUS' ENTERED AT 14:52:36 ON 17 AUG 2009
L4             1 SEA ABB=ON  PLU=ON  L3
                 D BIB ABS HITSTR
L5          6605 SEA ABB=ON  PLU=ON  FLUOROALKYLPHOSPHATE? OR FLUOROPHOSPHATE?
L6            16 SEA ABB=ON  PLU=ON  L5 AND ?CYANINE?
                 D 1-16 BIB ABS KWIC
L*** DEL     881 F HID
L7             2 SEA ABB=ON  PLU=ON  L5 AND POLYMETHINE
                 D 1-2 BIB ABS
                 E IGNATYEV NIKOLAI/AU
L8            51 SEA ABB=ON  PLU=ON  ("IGNATYEV N V"/AU OR "IGNATYEV NICOLAI"/AU
                  OR "IGNATYEV NIKOLAI"/AU OR "IGNATYEV NIKOLAI V"/AU)
                 E BIERMANN URS/AU
                 E WILLNER HEIGE/AU
L9           228 SEA ABB=ON  PLU=ON  "WILLNER HELGE"/AU
                 E FINZE MAIK/AU
L10           36 SEA ABB=ON  PLU=ON  ("FINZE M"/AU OR "FINZE MAIK"/AU)
                 E BERNHARDT EDUARD/AU
L11           50 SEA ABB=ON  PLU=ON  ("BERNHARDT E O"/AU OR "BERNHARDT E S"/AU
                 OR "BERNHARDT EDUARD"/AU)
                 E KUCHERYNA ADRRIY/AU
L12           23 SEA ABB=ON  PLU=ON  ("KUCHERYNA ANDRIY"/AU OR "KUCHERYNA
                 ANDRIY I"/AU OR "KUCHERYNA ANDRY"/AU)
L13          282 SEA ABB=ON  PLU=ON  L8 OR L9 OR L10 OR L11 OR L12
L14            3 SEA ABB=ON  PLU=ON  L13 AND (POLYMETHINE OR ?CYANINE?)
                 D QUE L14 STAT
                 D 1-3 BIB ABS
L15         6754 SEA ABB=ON  PLU=ON  L5 OR (FLUOROALKYL PHOSPHATE?)
L16           75 SEA ABB=ON  PLU=ON  L15 AND DYE?

     FILE 'REGISTRY' ENTERED AT 15:10:38 ON 17 AUG 2009
L17              STRUCTURE UPLOADED
                 D
L18           31 SEA SSS SAM L17
```

```
L19         564 SEA SSS FUL L17

     FILE 'CAPLUS' ENTERED AT 15:11:35 ON 17 AUG 2009
L20         407 SEA ABB=ON  PLU=ON  L19
                D QUE L20 STAT
L21           1 SEA ABB=ON  PLU=ON  L20 AND (POLYMETHINE? OR ?CYANINE?)
                D BIB ABS HITSTR


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   16 AUG 2009  HIGHEST RN 1174375-84-8
     DICTIONARY FILE UPDATES:  16 AUG 2009  HIGHEST RN 1174375-84-8

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
     experimental property data in the original document.  For information
     on property searching in REGISTRY, refer to:

     http://www.cas.org/support/stngen/stndoc/properties.html

     FILE CAPLUS

     Copyright of the articles to which records in this database refer is
     held by the publishers listed in the PUBLISHER (PB) field (available
     for records published or updated in Chemical Abstracts after December
     26, 1996), unless otherwise indicated in the original publications.
     The CA Lexicon is the copyrighted intellectual property of the
     American Chemical Society and is provided to assist you in searching
     databases on STN.  Any dissemination, distribution, copying, or storing
     of this information, without the prior written consent of CAS, is
     strictly prohibited.

     FILE COVERS 1907 - 17 Aug 2009  VOL 151 ISS 8
     FILE LAST UPDATED: 16 Aug 2009  (20090816/ED)
     REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2009
     USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2009

     CAplus now includes complete International Patent Classification (IPC)
     reclassification data for the second quarter of 2009.

     CAS Information Use Policies apply and are available at:

     http://www.cas.org/legal/infopolicy.html

     This file contains CAS Registry Numbers for easy and accurate
     substance identification.

     The ALL, BIB, MAX, and STD display formats in the CA/CAplus family
     of databases have been updated to include new citing references
```

information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> => d que l26 stat
L17 STR

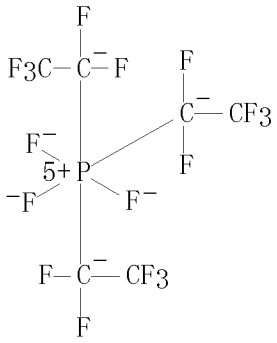
Structure attributes must be viewed using STN Express query preparation.
L19 564 SEA FILE=REGISTRY SSS FUL L17
L26 4 SEA FILE=REGISTRY ABB=ON PLU=ON L19 AND (INDOLIUM OR BENZOOXAZOLIUM OR BENZOTHIAZOLIUM)

=> d 1-4 ide can

L26 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-19-1 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzothiazolium, 3-ethyl-2-[3-(3-ethyl-2(3H)-benzothiazolylidene)-1-propenyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C21 H21 N2 S2 . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

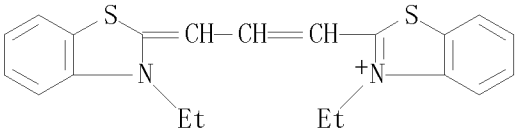
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 18403-49-1
CMF C21 H21 N2 S2



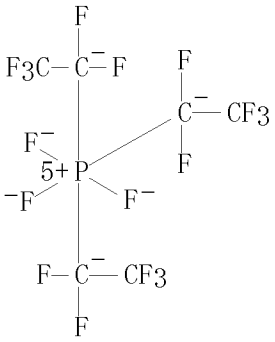
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

L26 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-18-0 REGISTRY
ED Entered STN: 29 Mar 2005
CN 3H-Indolium, 2-[3-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1-propenyl]-1,3,3-trimethyl-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C25 H29 N2 . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

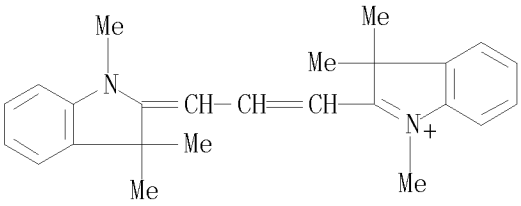
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 20766-56-7
CMF C25 H29 N2



1 REFERENCES IN FILE CA (1907 TO DATE)

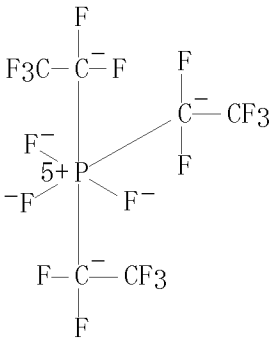
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

L26 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-15-7 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzothiazolium, 3-ethyl-2-methyl-,
trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C10 H12 N S . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

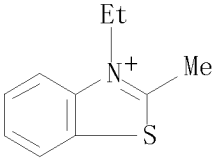
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 42846-15-1
CMF C10 H12 N S



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

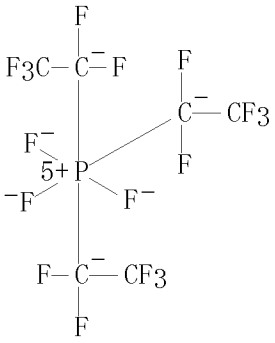
REFERENCE 1: 142:299401

L26 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-14-6 REGISTRY
ED Entered STN: 29 Mar 2005
CN 3H-Indolium, 1,2,3,3-tetramethyl-,
trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C12 H16 N . C6 F18 P
SR CA

LC STN Files: CA, CAPLUS, USPATFULL

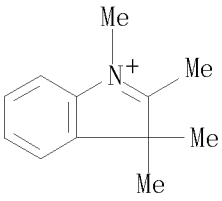
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 46149-03-5
CMF C12 H16 N



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

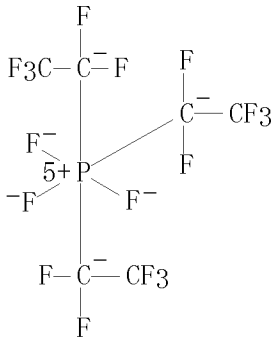
=> s l19 and benzoxazolium
9807 BENZOXAZOLIUM
L27 4 L19 AND BENZOXAZOLIUM

=> d 1-4 ide can

L27 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-20-4 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzoxazolium, 3-methyl-2-[3-(3-methyl-2(3H)-benzoxazolylidene)-1-propenyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C19 H17 N2 O2 . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

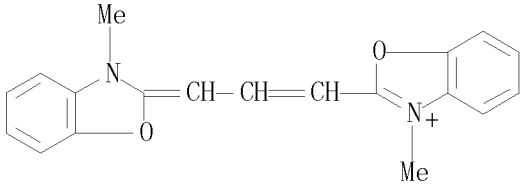
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 48198-86-3
CMF C19 H17 N2 O2



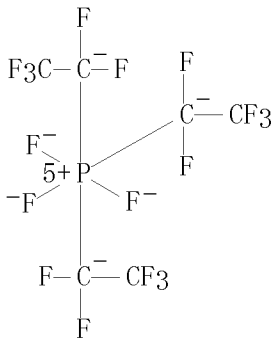
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

L27 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-17-9 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzoxazolium, 2,3-dimethyl-,
trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C9 H10 N O . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

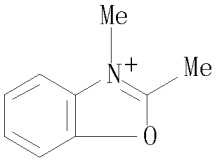
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 40265-56-3
CMF C9 H10 N O



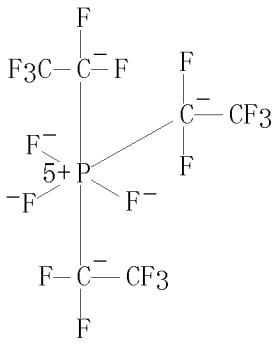
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

L27 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-16-8 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzoxazolium, 3-ethyl-2-methyl-,
trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C10 H12 N O . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

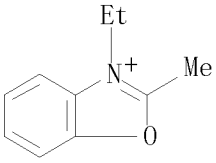
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 42846-14-0
CMF C10 H12 N O



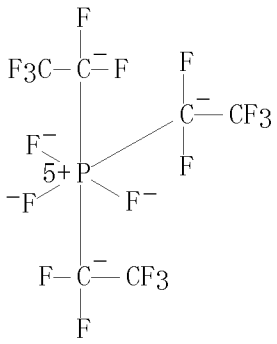
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

L27 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2009 ACS on STN
RN 847507-13-5 REGISTRY
ED Entered STN: 29 Mar 2005
CN Benzoxazolium, 3-ethyl-2-[5-(3-ethyl-2(3H)-benzoxazolylidene)-1,3-pentadienyl]-, trifluorotris(pentafluoroethyl)phosphate(1-) (9CI) (CA INDEX NAME)
MF C23 H23 N2 O2 . C6 F18 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

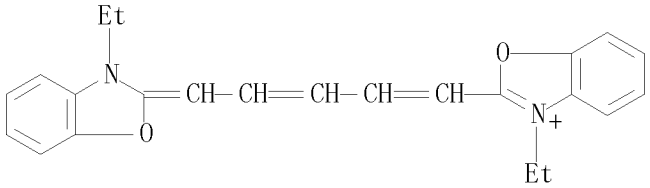
CM 1

CRN 429679-87-8
CMF C6 F18 P
CCI CCS



CM 2

CRN 37069-76-4
CMF C23 H23 N2 02



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:299401

=> d his full

(FILE 'HOME' ENTERED AT 14:51:05 ON 17 AUG 2009)

FILE 'REGISTRY' ENTERED AT 14:51:18 ON 17 AUG 2009
L1 STRUCTURE UPLOADED
D
L2 0 SEA SSS SAM L1
L3 1 SEA SSS FUL L1
D QUE L3 STAT
D IDE CAN

FILE 'CAPLUS' ENTERED AT 14:52:36 ON 17 AUG 2009
L4 1 SEA ABB=ON PLU=ON L3
D BIB ABS HITSTR
L5 6605 SEA ABB=ON PLU=ON FLUOROALKYLPHOSPHATE? OR FLUOROPHOSPHATE?
L6 16 SEA ABB=ON PLU=ON L5 AND ?CYANINE?
D 1-16 BIB ABS KWIC
L*** DEL 881 F HID
L7 2 SEA ABB=ON PLU=ON L5 AND POLYMETHINE
D 1-2 BIB ABS
E IGNATYEV NIKOLAI/AU
L8 51 SEA ABB=ON PLU=ON ("IGNATYEV N V"/AU OR "IGNATYEV NICOLAI"/AU
OR "IGNATYEV NIKOLAI"/AU OR "IGNATYEV NIKOLAI V"/AU)
E BIERMANN URS/AU

```
                E WILLNER HEIGE/AU
L9          228 SEA ABB=ON  PLU=ON  "WILLNER HELGE"/AU
                E FINZE MAIK/AU
L10          36 SEA ABB=ON  PLU=ON  ("FINZE M"/AU OR "FINZE MAIK"/AU)
                E BERNHARDT EDUARD/AU
L11          50 SEA ABB=ON  PLU=ON  ("BERNHARDT E O"/AU OR "BERNHARDT E S"/AU
                OR "BERNHARDT EDUARD"/AU)
                E KUCHERYNA ADRRIY/AU
L12          23 SEA ABB=ON  PLU=ON  ("KUCHERYNA ANDRIY"/AU OR "KUCHERYNA
                ANDRIY I"/AU OR "KUCHERYNA ANDRY"/AU)
L13         282 SEA ABB=ON  PLU=ON  L8 OR L9 OR L10 OR L11 OR L12
L14           3 SEA ABB=ON  PLU=ON  L13 AND (POLYMETHINE OR ?CYANINE?)
                D QUE L14 STAT
                D 1-3 BIB ABS
L15        6754 SEA ABB=ON  PLU=ON  L5 OR (FLUOROALKYL PHOSPHATE?)
L16          75 SEA ABB=ON  PLU=ON  L15 AND DYE?

     FILE 'REGISTRY' ENTERED AT 15:10:38 ON 17 AUG 2009
L17             STRUCTURE UPLOADED
                D
L18          31 SEA SSS SAM L17
L19         564 SEA SSS FUL L17

     FILE 'CAPLUS' ENTERED AT 15:11:35 ON 17 AUG 2009
L20         407 SEA ABB=ON  PLU=ON  L19
                D QUE L20 STAT
L21           1 SEA ABB=ON  PLU=ON  L20 AND (POLYMETHINE? OR ?CYANINE?)
                D BIB ABS HITSTR
L22           0 SEA ABB=ON  PLU=ON  L19 AND (INDOLIUM OR BENZOOXAZOLIUM OR
                BENZOTHIAZOLIUM)
                S L19 AND (INDOLIUM OR BENZOOXAZOLIUM OR BENZOTHIAZOLIUM)/CN

     FILE 'REGISTRY' ENTERED AT 15:16:31 ON 17 AUG 2009
L23           1 SEA ABB=ON  PLU=ON  (INDOLIUM OR BENZOOXAZOLIUM OR BENZOTHIAZOL
                IUM)/CN

     FILE 'CAPLUS' ENTERED AT 15:16:37 ON 17 AUG 2009
L24           3 SEA ABB=ON  PLU=ON  L23
L25           0 SEA ABB=ON  PLU=ON  L19 AND L24

     FILE 'REGISTRY' ENTERED AT 15:16:55 ON 17 AUG 2009
L26           4 SEA ABB=ON  PLU=ON  L19 AND (INDOLIUM OR BENZOOXAZOLIUM OR
                BENZOTHIAZOLIUM)
                D QUE L26 STAT
                D 1-4 IDE CAN
L27           4 SEA ABB=ON  PLU=ON  L19 AND BENZOXAZOLIUM
                D 1-4 IDE CAN


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   16 AUG 2009  HIGHEST RN 1174375-84-8
     DICTIONARY FILE UPDATES:  16 AUG 2009  HIGHEST RN 1174375-84-8

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.
```

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE CAPLUS



FILE COVERS 1907 - 17 Aug 2009 VOL 151 ISS 8
FILE LAST UPDATED: 16 Aug 2009 (20090816/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAplus family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

=> log h

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 41.96 | 595.96 |

| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| CA SUBSCRIBER PRICE | 0.00 | -18.86 |

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:19:33 ON 17 AUG 2009